

PLANTING GUIDE

Eryngium yuccifolium Michx.

Common Names:
rattlesnake master

Accession Numbers/Releases:

9068602 – Zone 1, Northern Iowa Germplasm

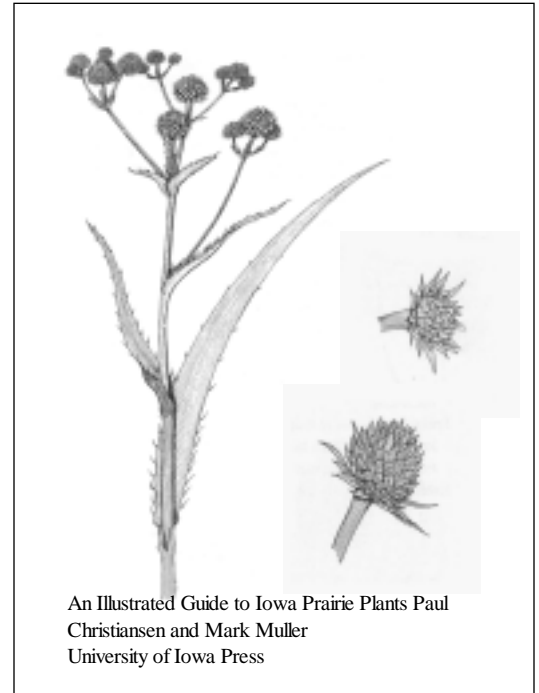
9068603 – Zone 2, Central Iowa Germplasm

9068604 – Zone 3, Southern Iowa Germplasm

Description:

Rattlesnake master is a warm-season perennial native forb which grows well on wet or dry Mesic prairie soil. Rattlesnake master height ranges from two to six feet tall from a short, thick rootstock. The bluish green basal leaves are up to three feet long and up to

1½ inches wide. The leaves along the stem are much shorter, but they may be as wide as the basal leaves. All the leaves are thick and parallel veined and have soft or weak prickles along the edges. The bristles are spaced far apart. The leaf bases clasp the single, erect stem. The flower heads are on stout peduncles at the tip of the stem. Each globos or nearly spherical flower head is from 1/2 to 1 inch in diameter. Each head is made up of many small flowers. Whitish bracts stick out sharply from the flowers, which gives the flower head a rough, prickly feel and appearance. The heads have a “honeylike” odor. Individual fruits, which mature in the spherical flower head, are less than 1/10 inch long. The root of rattlesnake master has been used medicinally by American Indians and pioneers.



Eryngium is Greek for a “prickly plant” and *yuccifolium* is Greek for “yucca leaves”.

Purpose: Rattlesnake master can be used in the following situations: roadside plantings, prairie restoration, prairie landscaping, wildlife cover, and in wildflower gardens because of its attractive appearance.

Habitat/Range: Rattlesnake master is found generally on wet or dry prairies and prairies reflects throughout the Upper Midwest. Blooms June to September.

Source: Seed of these accessions 9068602, 9068603 and 9068604 were collected from native stands located in the Northern (Zone 1), Central (Zone 2) and Southern (Zone –3) counties respectively of the state of Iowa.

Establishment (For Seed Production): Stratify seed in cold moist conditions for 60 days. Prepare a clean weed free seedbed by disking and harrowing or chemical weed control. Firm the seedbed by cultipacking. Seedbed should be firm enough to allow the scarified seed to be planted ¼ inch deep. Rattlesnake master can also be planted vegetatively with a high degree of

success. Plants are self-pollinated. Seed can be readily harvested with a combine. Anticipated yields documented in literature searches ranged from 1,000 to 1,200 bulk pounds/acre. Seed harvest lasts from September to November.

Rattlesnake master grows well on wet or dry Mesic prairie soils. It is easily propagated by division. To produce transplants divide mature plants in spring or fall, and to establish on permanent sites, use transplants in spring or fall.

Fertilizer: Apply no fertilizer the establishment year unless soil test indicates a severe deficiency of potassium and/or phosphorus. Use no nitrogen during the establishment year as this can encourage weed competition.

Seeding Rates (For Seed Production): Seeding rates for rattlesnake master should be about 3.25 pounds per acre of Pure Live Seed (PLS) for seed production in 36 inch rows. There are 177,700 clean seeds in one pound of seed. For solid stand production, drill three times the seeding rate of row production to maintain 40 PLS per square feet.

For prairie restoration or diverse plantings for wildlife refer to NRCS Iowa –327 Conservation Cover Standard that pertains to this species.

Seeding Dates: Use stratified seed for spring planting (May to June), and unstratified seed for a fall dormant seed (November to March).

Management: Reduce weed competition by mowing or cultivating between the rows of the rattlesnake master. For grassy weed control usage of a post grass herbicide can provide weed control and will encourage a good stand.

Note: Herbicide product may not be registered for this forb species in your state. NRCS does not endorse the use of any product. Use label recommendations for application.

See NRCS Iowa Prescribed Burning Practice Code 338 on burning criteria. Burning may be appropriate where plant vigor declines in native plant species or where invader species threaten a native mix stands.

Availability of Plant Materials:

Breeder's material is being produced by the Plant Materials Center, Elsberry, Missouri and the University of Northern Iowa (UNI) at Cedar Falls, Iowa.

Source identified seed will be released to interested commercial seed growers.

A list of commercial growers can be obtained from the Elsberry Plant Materials Center or Iowa Crop Improvement Association - The Iowa Seed Directory.

References

Prairie Plants of Illinois; pp. 108-109 Voigt, John W. and Mohlenbrock, Robert H.; both from Southern Illinois University, Edwardsville, Illinois.

The Prairie Garden, 70 Native Plants You Can Grow in Town or County; p. 37 & pp. 96-97, Smith, J. Robert and Smith, Beatrice S., University of Wisconsin Press, Madison, Wisconsin 1980.

Wildflowers of the Tallgrass Prairie, The Upper Midwest, p. 131; Runkel, Sylvan T. and Roosa, Dean M., Iowa State University Press, Ames, Iowa 1989.

A Field Guide to Wildflowers; p. 44; Peterson, R. T. and McKenny, M., Houghton Mifflin Company, Boston, Mass. 1968.

Flora of Missouri; p. 1122; Steyermark, Julian A., Iowa State University Press, Ames, Iowa 1963.

4/27/00

The U.S. Department of Agriculture (USDA) prohibits discrimination in its programs on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, and marital or familial status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audio tape, etc.) should contact the USDA's TARGET Center at 1-202-720-2600 (Voice and TDD).

To file a complaint, write the Secretary of Agriculture, U.S. Department of Agriculture, Washington, D.C. 20250, or call 1-800-245-6340 (voice) or 1-202-720-127 (TDD). USDA is an equal opportunity employer.